



BETTER  
LIVES  
THROUGH  
SCIENCE  
BIRMINGHAM  
14-19/09/2010

# British Science Festival 2010

## EVALUATION

# Summary

The British Science Festival in 2010 was held in Birmingham in what is intended to be a long term partnership between the British Science Association, Aston University, University of Birmingham, Birmingham City University, Birmingham City Council and Birmingham Science City, as well as local business and industry including Jaguar Land Rover and Goodrich. This new model for the British Science Festival will ensure that we are able to gauge the impact the Festival has on the local area, including schools.

## Impact

The British Science Festival is the UK's largest celebration of science engineering and technology. With approximately 55,000 event attendances, and over 350 scientists, engineers, performers and commentators coming together to discuss, dissect and celebrate subjects as diverse as obesity, climate change, the science of marketing and forensic linguistics, the Festival gave the people of Birmingham and the surrounding area the opportunity to explore interesting topics which relate to their lives.

Almost 4000 school children attended the Festival with a higher percentage of secondary schools visiting than primary schools. The Young People's Programme was co-ordinated by Thinktank and activity took place at Thinktank, throughout Millennium Point and at Aston University. 22% of schools attending had not visited Thinktank before.

## Demographics

The demographics of people visiting the Festival in Birmingham was diverse with an equal gender split, almost half of evaluation respondents under the age of 35 and with almost 20% of respondents from BME groups.

## Process

Lessons learnt will prove invaluable in four years' time when the Festival returns to Birmingham. The inter-Festival years will be important in maintaining contacts with local organisations and business, in building support among the business community for the British Science Festival and in embedding a culture of science activity in and around Birmingham which appeals to the local population and offers regular opportunities for engagement. The Steering Group will advise on how best to ensure this is effective.

# WITH THANKS TO

The British Science Festival 2010 took place in Birmingham from 14<sup>th</sup> – 19<sup>th</sup> September thanks to the following partners, sponsors and supporters

## Principal Partners, Sponsors & Supporters



## Principal Corporate Sponsor



## Lead Sponsors



## Festival Contributors



## Additional Thanks to



# INTRODUCTION

This year, the British Science Festival was hosted in the vibrant heart of England; Birmingham. Being Europe's largest, most established and most press worthy science event, the British Science Festival attracts thousands of people to attend, participate in and celebrate science.

The Festival takes place at a different university each year, showcasing STEM (Science, Technology, Engineering and Maths) events around the city and at the campus. In Birmingham, events took place in a huge array of venues to attract a wider range and greater numbers of the public, such as; Centenary Square, Aston University, University of Birmingham and Museums and Libraries around Birmingham.

The huge media attention brought to the event had a predicted worldwide outreach of over 62 million people.

This evaluation will cover three main areas;

1. Impact  
Assessing the effects of the Festival
2. Demographics  
This will assess who took part in the festival
3. Process  
The festival has been analysed and compared to previous festivals.  
Any feedback will be taken into consideration to improve future Festivals

# IMPACT

## Performance against key targets

These targets were set by the Steering group of the Festival in Birmingham, comprising representatives from the British Science Association, Aston University, University of Birmingham and Birmingham City University, Birmingham City Council, Advantage West Midlands, Birmingham Chamber of Commerce, CBI West Midlands, Thinktank and Marketing Birmingham, amongst others.

## Festival attendance

### Target

80,000 event attendances

### Success against target

An estimated 55,000 attendances with almost 11,000 attending ticketed events.

### Target

220 individual events in the main Festival programme

### Success against target

237 individual events with over 260 opportunities for participation

## Media Targets

### Target

An increase in the national and international coverage from 2009

### Success against target

While the number of items in national newspapers decreased from 169 to 160, these did generate more column inches (3282 up from 2857 in 2009) and the number of papers carrying stories from the Festival also increased, as did front page stories, up from 4 in 2009 to 6 in 2010. The number of items international publications rose from 101 in 2009 to 112 this year.

### Target

An increase in Sunday newspaper coverage from 2009

### Success against target

The number of items in the Sunday newspapers doubled from 8 to 16 in comparison to 2009. The increase from the Sunday Times (from 1 to 7) is due to a pre-meeting with their science correspondent to discuss the potential stories. We will be investigating further collaboration with a greater number of Sunday papers for 2011.

### Target

500 Twitter followers

### Success against target

Over 800 people following #BritishSciFest.

### Target

A 25% increase in regional coverage from 2009

### Success against target

The regional coverage for 2010 is below the average of the last ten years. We didn't have any media partners this year, but we still received a large amount of support from the local Birmingham publications. It is unclear why we didn't achieve more, as

the stories coming out of the Festival were not inaccessible and would have made good stories for these kinds of publications. The on-going pressures on the regional print industry may go some way to explaining the continual downturn in regional coverage since 2006.

#### Target

A 100% increase in trade and technical press coverage from 2009

Success against target

Trade and technical press coverage for the Festival increased by 59%.

#### Target

35 opinion pieces generated

Success against target

There was a slight increase in the number of opinion pieces (27 up from 23 in 2009), mainly focussed around the debate on cannabis licensing that came out of the Festival. Other stories that attracted comment and opinion pieces were Lord Sainsbury's Presidential Address on 'Better lives through science' where he articulated his views that the debate on the use of GM crops should be reopened, and Robin Dunbar's research on new relationships costing you two friends.

#### Target

10 pieces in BME media

Success against target

Achieved 13 pieces in BME media.

A full analysis of the Festival media coverage can be found at

[www.britishsciencefestival.org](http://www.britishsciencefestival.org)

### Business Targets

Ensure that the business community participates in the Festival with:

#### Target

At least 500 attendees from businesses

Success against target

Business attendees featured in every aspect of the British Science Festival. From speaking at events, interacting with school groups and families in the interactive exhibitions, attending events specifically devised to provide small business with useful information, as well as attending events throughout the programme. 5% of people (approximate 550) attended events for professional reasons and were not from academia,

#### Target

At least 50 business attendees at the Festival dinner

Success against target

There were 2 main dinners to which representatives of local, regional, national and international businesses we invited – the President's Dinner and the Festival dinner. 14 attended the President's Dinner and 38 attended the Festival Dinner.

#### Target

To raise £300,000 in sponsorship

Success against target

£448k was raised, including grants.

### Target

Create a minimum of 2 business-led events which encourage businesses to reconsider the role of science within business, with specific networking benefits, delivered with at least one notable speaker

#### Success against target

14 events were organised by businesses including Jaguar Land Rover, Elsevier and Linus publishing, A further 6 events were supported by business including Eon, Google and Laerdal UK. BlackBerry ran events as part of the schools programme. One event was run specifically for business in the West Midlands focussing on accessing grants and funding from the EU.

Networking opportunities presented to business included the Sponsor's Dinner, Festival dinner and Press receptions.

Birmingham Science City: Technology in Action gave an insight into how business can benefit from working with R&D institutions, and included opportunities for networking between business and researchers.

Business formed a large part of the hands-on activity for both schools groups and families, with participation by Saudi Aramco, Goodrich, Jaguar Land Rover and Abbott.

### Target

Create a legacy of increased engagement of business with the local science base

#### Success against target

With the new 4 year cycle model for the Festival the legacy impact of this target will not be immediately apparent. However excellent relationships with regional business and industry were formed with both Jaguar Land Rover and Goodrich having a significant presence in the programmes for adults, families and school groups. We worked closely with them to develop programmes that showcased their technical

### Target

Ensure that the business potential from the Festival is fully documented and create a framework of business engagement activities to sustain interest and contacts as a platform for 2014

#### Success against target

The British Science Association will continue to work with sponsors including Jaguar Land Rover and Goodrich in other areas of the Association's work, thereby maintaining contact with key partners. It is intended that a mixture of public science events, featuring local business and industry, and business engagement activities will continue in the inter-Festival years. The Steering Group will advise on how this can be achieved.

### Outreach

Our main area of outreach activity was through Trident Reach. Trident Reach are one of the leading social investment charities in the Midlands, dedicated to supporting vulnerable individuals and the communities in which we are based. We provided the charity with 70 weekly passes for use by their customers which allowed them to access events at the Aston University and University of Birmingham campuses.

# DEMOGRAPHIC

## Target

Festival speakers to be representative of the 9% BME national demographic

## Success against target

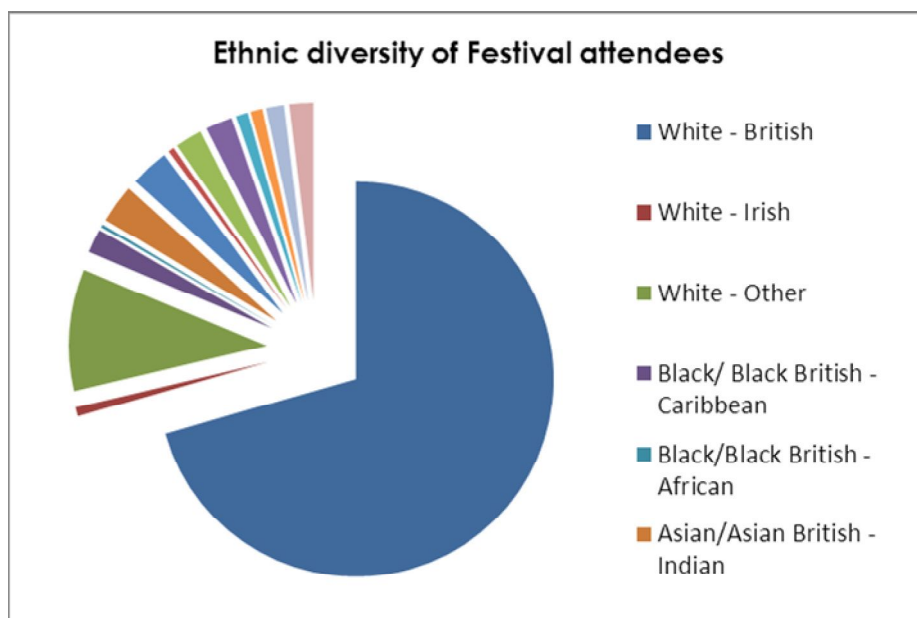
It is difficult to quantify this due to the low participation rates of presenters in completing the evaluation form.

## Target

15% of Festival attendees to be BME

## Success against target

19% of people who filled out the evaluation were from BME groups. 71% considered themselves White British or White Irish with 10% of people choosing the White - Other category.



## Target

34% of Festival attendees to be 18 – 35

## Success against target

45% of people who completed the evaluation were aged 18-35

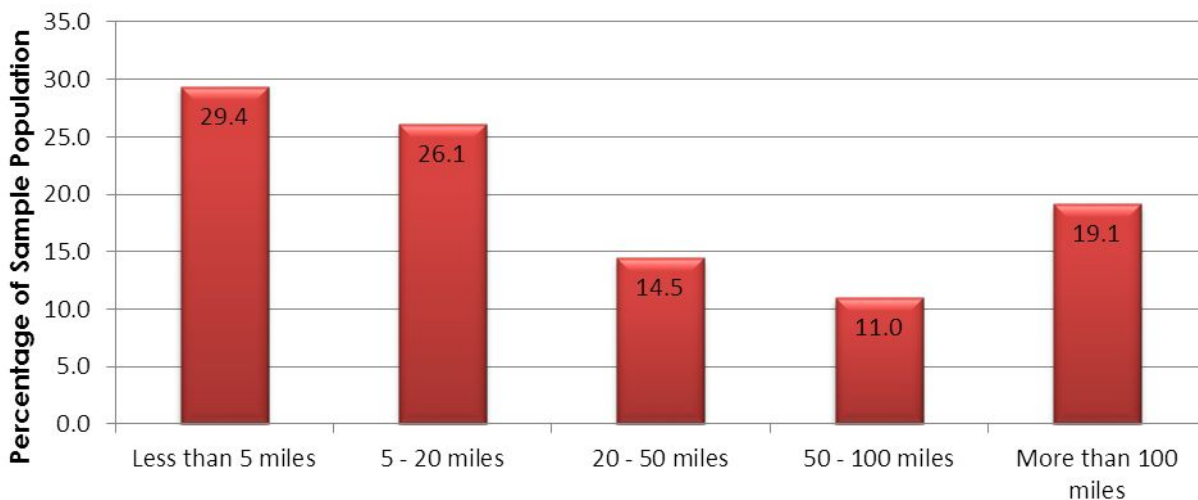
## Target

An equal gender split Festival attendees

## Success against target

49% male and 51% female

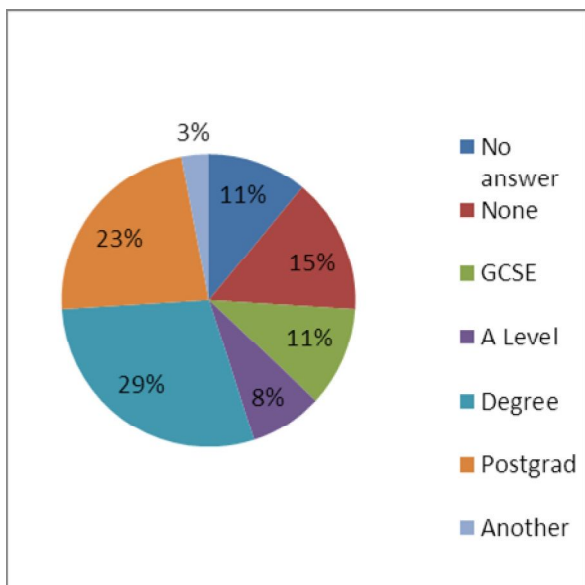
### Distance Travelled to attend Birmingham Science Festival



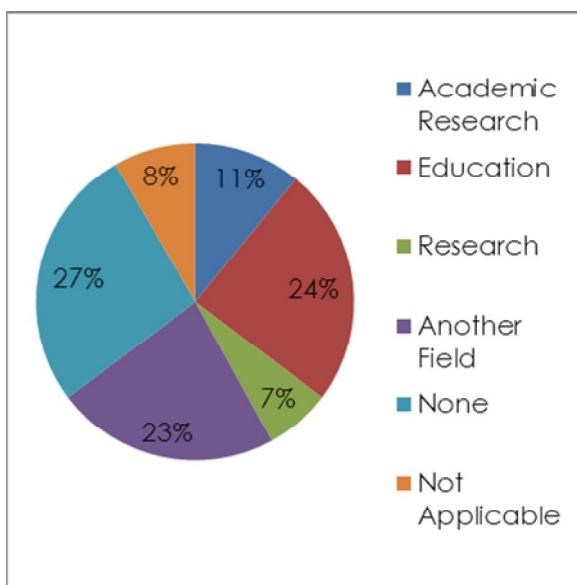
As a public science event the British Science Festival aims to engage with people who might otherwise not consider the impact the science, engineering and technology has on their lives, or who might not recognise the wide variety of careers open to those studying science. To evaluate the effectiveness of the Festival in engaging with these people we looked at two indicators: level of science studied and career background were analysed.

These results are taken in the most part from people attending ticketed events. Massive participation by local families at the weekend can be seen as additional to these data.

#### Level of Science Education



#### Careers in science



as a parent, I now understand the importance of more science in school

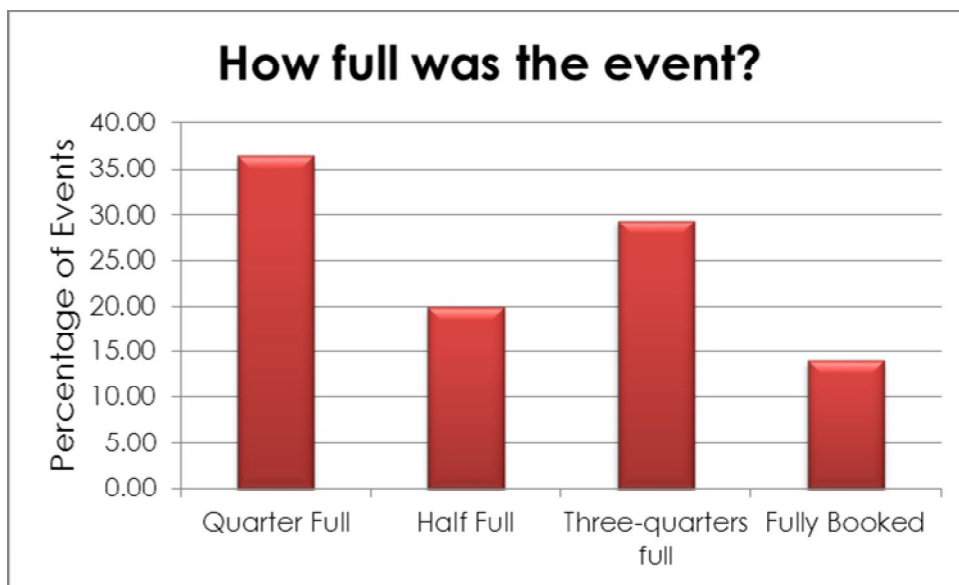
very interesting ideas and well presented, left me lots to think about

best lecture ever attended, I want to hear more, when's the next one next year!?

# Event feedback from staff and Festival Assistants

One specific part of this evaluation looked to see how full events were. Staff were asked to note down whether an event was a quarter, half, three quarters or fully booked.

Here are the results:



It is clear that a lot of events were not completely full. As a result of this, fewer excellent quality events may be better than lots of events.

In terms of the quality of the events staff and Festival Assistants gave an average score of 4.4/5 when rating the activity in terms of enjoyment, how educational or informative the event was, the level of audience participation, the clarity of science featured in the event and the overall organisation of the event.

While comments were overwhelmingly positive, there were still some comments about presenters just reading out their talk, or overuse of powerpoint slides with too much data and not enough explanation. Long events which gave no opportunity for a break were also criticised. These are all areas the Festival team will look at for future years.

# PROCESS

The new Festival pattern of visiting fewer venues on a more regular basis means that real learning can take place to improve the process of planning and executing the Festival, and forging and maintaining effective working relationships with local partners.

Lessons learnt

Work to engage the surrounding communities earlier in the programme planning process

Ensure that all three Birmingham Universities are fully engaged and involved early in the process

Ensure signage and maps are clear both at the University campuses and around the city

Have fewer events within in the programme. Some events were very poorly attended, partly due to too many events running in parallel.

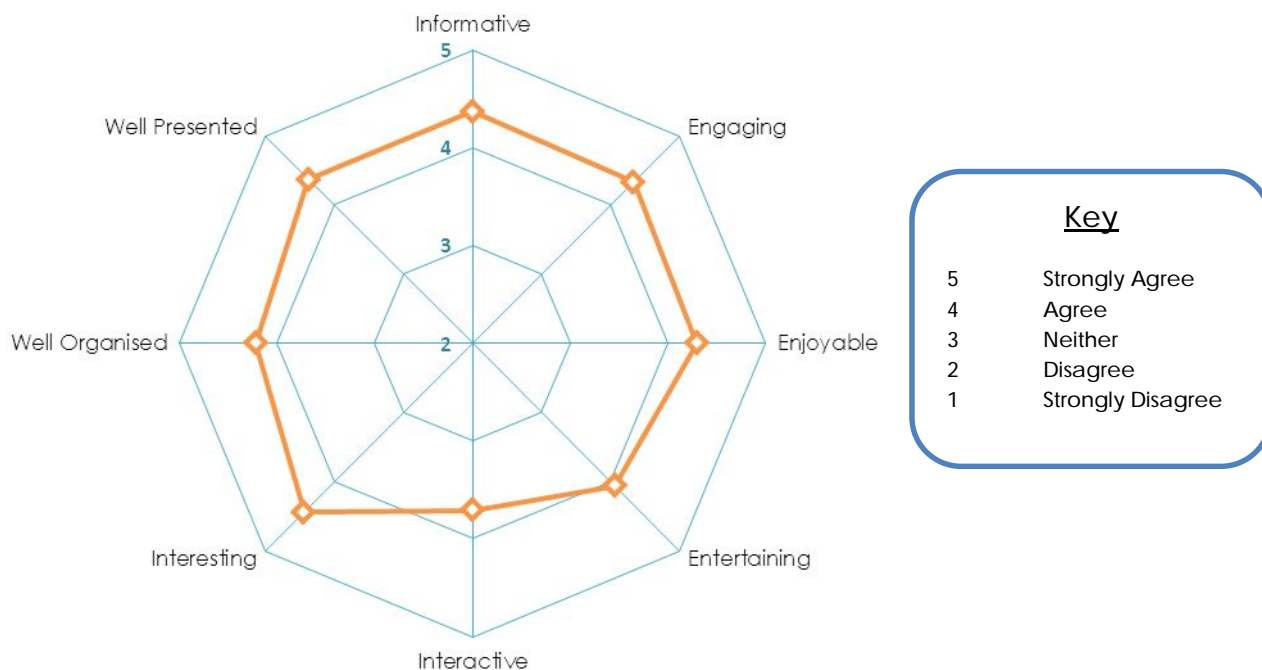
# EVALUATION

As we can see from the range of data, the events at Birmingham's British Science Festival 2010 were rated very highly. In comparison to last year's science festival in Surrey, 88% of respondents rated the events as educational/informative whereas this year the figure rose to over 93%.

## How did we analyse the quality of the festival?

Before the festival a qualitative and quantitative questionnaire was designed for people to fill in at the end of any events they attended. The evaluation form aimed to assess the quality of events that took place and also analysed the background of the individual; gender, distance travelled to get to the festival, ethnicity and educational background. (See appendix 1 for the evaluation form)

Over 600 evaluation questionnaires were filled out (public and staff), so a good cross section of information was provided. For each event, a rating of 1 – 5 was used to give an average for a certain aspect of the event, (1 being strongly disagree and 5 being strongly agree.) such as the event was educational, informative etc.

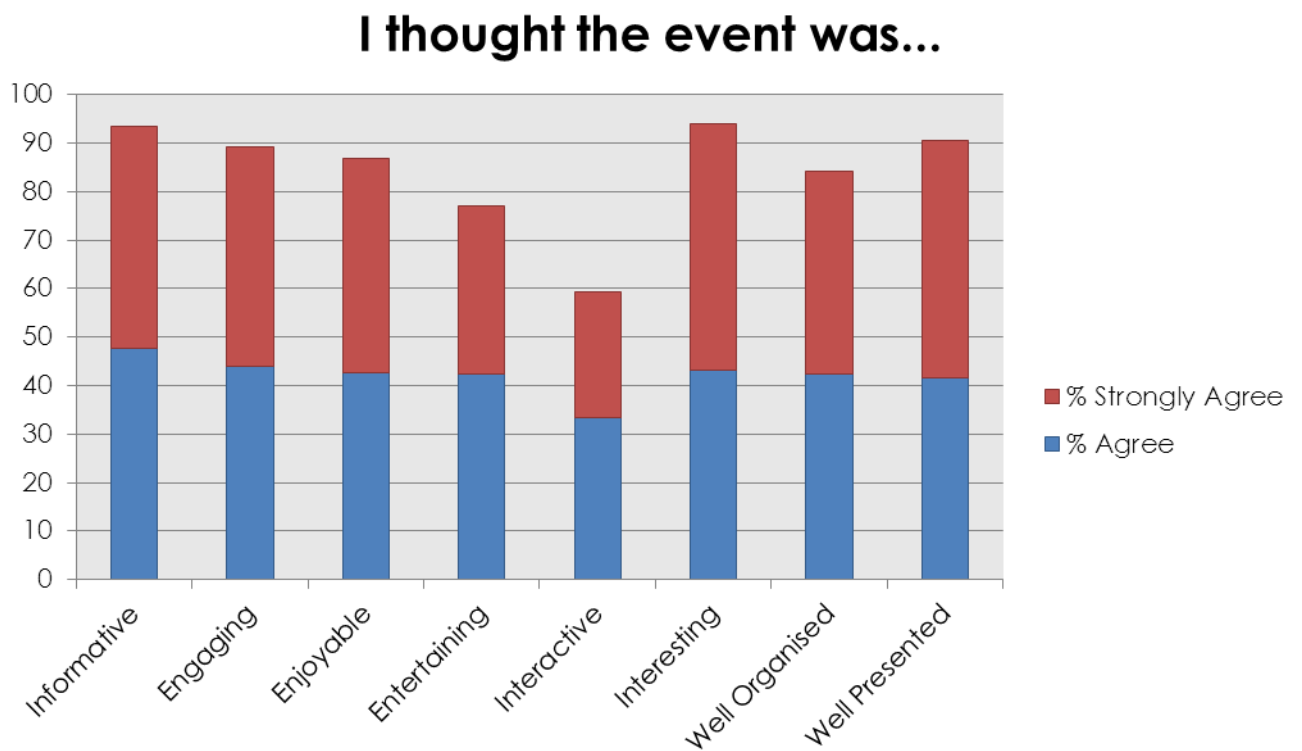


From the results, the most highly rated quality of the events was that they were highly interesting, informative and well presented. However, the least rated quality of the events was their interactivity.

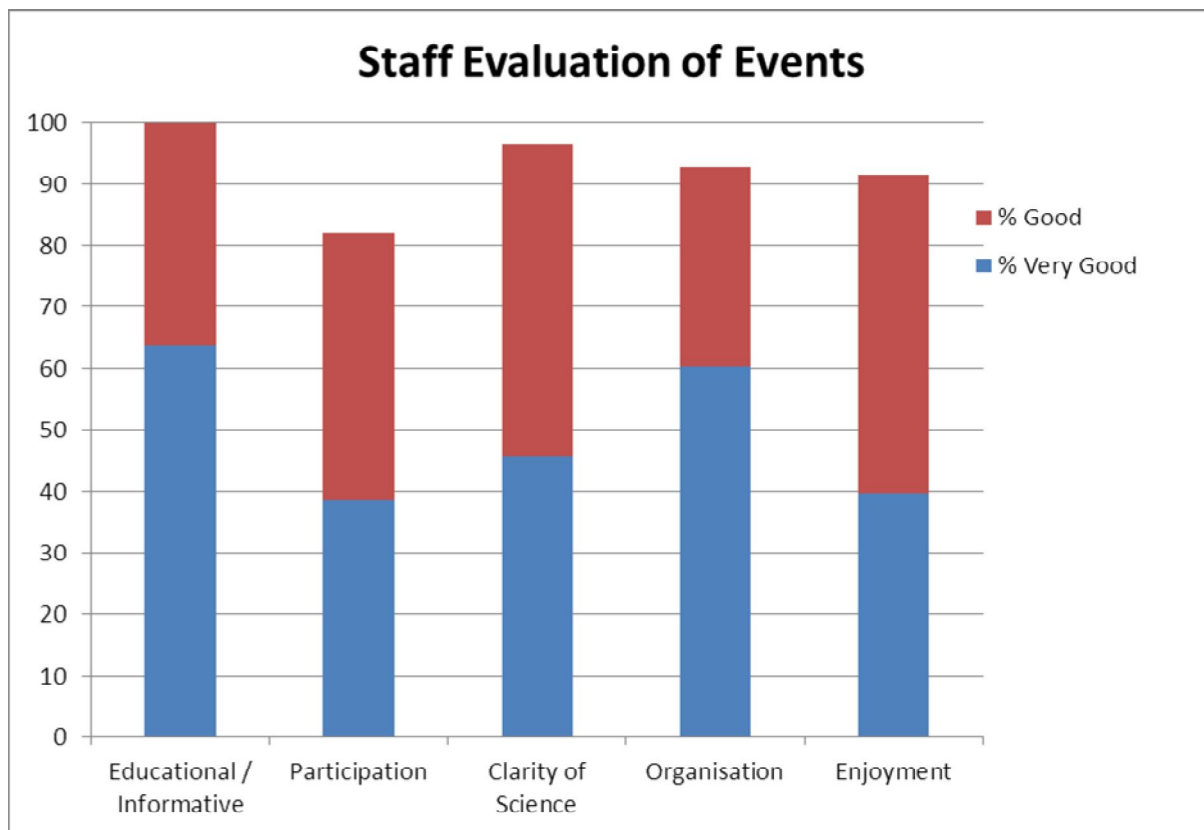
We also asked the people answering our evaluation questionnaires to rate the overall experience at the British Science Festival on a scale of 1 (Very Poor) to 5 (Very Good).

The average was 4.35; 4 being good and 5 being very good.

The data have also been represented in another way; the percentage of people who rated the quality of certain aspects of their events as good or excellent.



# Event feedback from staff and Festival Assistants



# YOUNG PEOPLE'S PROGRAMME

The Young People's Programme was contracted to Thinktank, making use of their facilities at Millennium Point and their expertise in providing quality engagement for schools in the West Midlands.

## Introduction

The Young People's programme at the British Science Festival is an essential, highly visible part of the Festival. The British Science Association contracted Thinktank Birmingham Science Museum as a regional centre of expertise to co-ordinate this programme.

The Young People's Programme took place on four sites including Thinktank itself; the Faculty of Technology, Engineering and the Environment at Birmingham City University within Millennium Point; and Aston University campus. There was a fourth satellite venue of Birmingham University providing a day of university based activities on their campus. The majority of the primary and secondary Key stage 3 provision was located within Millennium Point, with some Key stage 3 and 4/5 at Aston University.

## Numbers

During the period of the Young People's Programme between 14<sup>th</sup>-19<sup>th</sup> September 2010 4,907 school students and their teachers were booked to take part in the Young People's Programme, comprising of 1,323 primary school pupils and 3,339 secondary school students (giving a 29% primary, 71% secondary split in the schools audience).

During the four days of the Young People's Programme there was a decline in booked numbers with schools cancelling close to the festival and some just not arriving on the day. The two most common reasons sited for this drop out was withdrawal of support and finance for the visit by the Senior Management of the school. The numbers of actual students visiting dropped to 3,892 students with 443 teachers, again with a higher percentage of secondary students visiting than primary pupils.

A more detailed evaluation of the Young People's Programme is available at [www.britishsciencefestival.org](http://www.britishsciencefestival.org).

# Numbers

<b>Number of ticketed event attendances</b>	10676
<b>Number of weekly passes</b>	
Staff and students at Universities	3081
Speakers and organisers	559
Weekly passes purchased	40
Other weekly passes (sponsors, invited guests)	854
Trident weekly passes (local community organisation for disadvantaged groups)	77
Weekly passes given to people attending specific events (eg BBC, ASDC etc)	81
Festival assistants	85
Bursary students	28
YPP presenters	86
<b>Estimated attendance at drop in activities</b>	32000
<b>Attendance in YPP</b>	4907
<b>Attendance in press centre</b>	100
<b>Total attendance</b>	52574

